

Implants. What should we be aware of before embarking on implant therapy.

What are implants?

They are titanium “screws” that are placed in the jaw bone via a surgery to function as roots. Crowns or bridges are connected over the implants to replace missing teeth.

Due to rapid technological advancement in the field of implants, implants now provide an improved alternative to replacing teeth with a reasonable to good long term success rate.

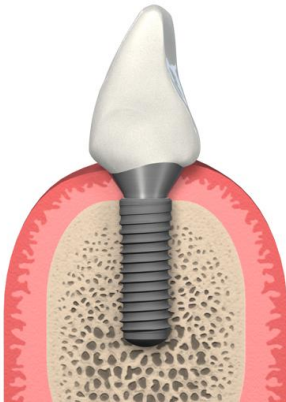


Photo A :The crown has yet to be placed over the implant coloured purple in the above photo.

Are all implants created equal?

No. There are many different brands in the market with different designs and texture of the implants. There are also some brands of implants that have a different technique of insertion of the implant during surgery.

An important question to ask the dental surgeon when deciding on implant therapy is find out the amount of research and technical support the implant brand/company has. You can also go on the internet to check this information. Generally the cost of most implants are about the same and corresponds to the amount of R and D the implant company has done and success rates recorded in scientific journals. It is definitely not wise to choose to do an implant with a certain clinic just because it is the cheapest in the market.

The total cost of the implant therapy will take into account the brand of implant used, how thorough and comprehensive the planning of the implant positions are, the type of X rays needed (2 D or 3D) and of course, the skill of the surgeon (specialist or general practitioner).

What are mini – implants?

These are implants that have a much smaller diameter than the conventional implants. They are also much cheaper than the regular implants. In general, these should only be used to replace a narrow tooth like the lower front teeth. They are too narrow to support replacing multiple teeth or bridges. Also, as they are very thin, they can break if the load on the teeth is too heavy and are difficult to clean.

Do implants last forever?

This depends on many factors. Implants definitely cannot get decay. However, they are susceptible to gum disease just like a natural tooth. Hence, if the oral hygiene of the patient is poor or he smokes or has gum disease on his other teeth that is not controlled, then there is a high risk he may lose his implant sometime in the future. The patient's medical condition and type of medication he is on also play a part at the time of implant placement as well as in the future. Implants also have different parts to it i.e. the titanium screw and the crown that goes onto it. If the planning of the implant position is not done well and there is excessive load on the implant, it may give way as well.

Also, due to wear and tear, it may also be necessary to replace the crown over the implant. That is another reason to choose an implant that will probably be in the market for years to come. Otherwise the replacement components for the crown may not be available.

What are some of the factors that the dental professional will look at when planning for implants?

(1) Function

The positioning of the implant is important and should be planned carefully via the use of 2D or 3D x-rays and models (mould) of the patient's teeth. It is of

no use to insert an implant if at the end of the day it cannot enhance the patient's ability to chew or last a reasonable length of time.

(2) Aesthetics.

The smile line of the patient is important as with the thickness of gum tissue and the level of the gum line in deciding the position of the implant to be placed. Other considerations include the diameter of implant used as well to decide if any additional procedures such as grafting of extra gum or bone is needed.



Photo B : The patient shows the entire length of the front teeth when she smiles. This is called a high smile line and makes accurate placement of implants in the front difficult. There is no margin for error as an implant which is placed wrongly is easily noticeable as not being symmetrical to the rest.

A certain amount of bone and gum level and thickness are needed to provide an implant that looks like a natural tooth and not many patients have the ideal amount. Hence, additional surgeries such as bone and gum grafting may have to be done prior to or at the same time of implant placement to achieve the ideal amount. Please see below.



In fact, implant therapy should be decided on and planned even before the loss of a diseased tooth. Once the tooth is extracted, gum and bone starts to shrink away and implant placement should be timed appropriately to minimize this shrinkage. There are also other methods to minimize shrinkage if implants cannot be placed soon after the extraction of teeth. This procedure is known as socket preservation and is usually used if the diseased tooth has had a long history of infection and bone is already lost around the tooth or if

the patient has to delay implant placement due to finance or is too young for it.



Photo C : Graft material placed in the socket of the extracted front tooth with stitches in place.

Are implants the best choice to replace a missing tooth or teeth?

Not necessarily. All types of teeth replacement should be discussed with the patient as well as the pros and cons of each treatment modality before deciding on implants. Implants certainly provide a good option to replacing teeth but sometimes the circumstances or oral environment may not permit its use or they cannot provide for a better aesthetic and functional result compared to the other options.

What type of after care has to be provided after the placement of implants?

The patient should be taught proper oral hygiene techniques including the Bass technique of brushing and flossing or the use of other interdental aids. They also have to regularly get their teeth, gums and implants checked and cleaned. Special instruments are used to scale around implants and x rays are periodically taken to ensure no gum disease has occurred. A gum check and occlusion or load check is also done periodically on the implant.

Smoking affect the success rate of implants as do patients with chronic disease such as diabetes or osteoporosis. These patients have to be followed up more closely.